

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Appln. Of: BANISTER

Serial No.: 10/786,718

Filed: February 24, 2004

For: PULSE ACTIVATED ACTUATOR PUMP SYSTEM

Group: 3746 Confirmation No. 2762

Examiner: Freay, Charles Grant DOCKET: MEDIPACS 04.03

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
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APPELLANTS' REPLY BRIEF UNDER 37 CFR 1.193 (b)

This Reply Brief is being filed in response to the Examiner's Answer dated March 23, 2011. Appellant responds to these new points of argument as follows.

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STATUS OF THE CLAIMS

Claims 2, 3, 5-7, 17, 19-21, 24-26, 58-61 and 63-78 are pending in the application.

Claims 8-14, 16, 18 and 27-57 are withdrawn. Claims 2, 3, 5-7, 17, 19-21, 24-26, 58-61 and 63-78 stand finally rejected under 35 U.S.C. §103(a). Appellant hereby appeals the foregoing final rejection for claims 2, 3, 5-7, 17, 19-21, 24-26, 58-61 and 63-78 that stand finally rejected under 35 U.S.C. §103(a).

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GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The issues in this appeal are:

(1) whether claims 2, 3, 15, 17, 19-21, 24-26¹, 58-61, 63-65 and 70-78 are patentable over da Costa in view of Chinn, and further in view of Bar-Cohen, with regards to 35 U.S.C. § 103(a); and

(2) whether claims 5-7 and 65-69 are patentable over da Costa in view of Chinn and Bar-Cohen as applied to claims 58, 63 and 59, above, and further in view of Culp with regards to 35 U.S.C. §103(a).

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¹ The Final Action Summary Form PTOL-326 includes claims 24-26; however, claims 24-26 are not mentioned in the detailed Action. Based on the earlier prosecution it is believed the Examiner intended to group claims 24-26 with the rejection based on da Costa and Chinn, and it has been so treated.

ARGUMENT

Appellant is satisfied with the arguments raised in the appeal brief, which have generally not been adequately addressed by the Examiner's Answer. Specific flaws in the Examiner's Answer are herein identified.

Appellant first notes that the absence of a specific argument to one of the many points raised in the Examiner's rejection, does not in fact mean that Appellant acknowledges that point to be true. The burden is on the Examiner to make a prima facie case on the merits and, failing that, no rebuttal is needed. Turning to the merits, throughout prosecution of the subject application, including the numerous rejections and the Examiner's Answer, the Examiner has been unable to show how the cited references, alone or in combination with each other, either teach or make obvious each requirement of the claims. The recently filed Examiner's Answer attempts to overcome the shortcomings of the rejections, but fails to do so. Rather, the reasoning put forth in the Examiner's Answer is at best misleading, and is ultimately incorrect.

Independent claim 58 requires, in part, "a plurality of individual actuators arranged contiguously in a series and located in the chamber opposite to the inner surface and *in contact with the liquid.*" (emphasis added). On pages 9-10 of the Examiner's Answer, the Examiner attempts to show that the hermetic compressor taught by da Costa can be used with liquids, not just refrigerant gasses. Nowhere in the four corners of da Costa is there any mention of a liquid being used with the hermitic compressor. Nevertheless, the Examiner contends that "one of ordinary skill in the art would understand the teachings of the da Costa reference are applicable to pumps in general, and not just refrigerant compressors, da Costa in the background section at column 1, lines 51-54 discusses USPN 5,271,724, which is directed to a pump for liquids." *See* Examiner's Answer, page 10. This connection is wholly incorrect, as da Costa references U.S.

Patent No. 5,271,724 merely to show that there are a variety of pumping solutions known in the art (such as crystal piezoelectric action), but explicitly states, “such solutions are not applicable to refrigeration systems in general.” *See* da Costa Col. 1, lines 51-54. Thus, da Costa is explicitly teaching that pumps for liquid are incompatible, or at least not presumptively compatible, with the refrigeration compressor taught by da Costa.

The Examiner's attempt to show that one of ordinary skill in the art could use liquids in da Costa's compressor is simply incorrect. In fact, the Examiner's assertion appears to attempt to mislead one into thinking that da Costa can be used with liquids. It simply cannot.

Refrigeration compressors operate with a gas refrigerant, as taught by da Costa. The only mention in da Costa of anything reasonably similar to pumping a liquid, in fact explicitly teaches away from the Examiner's assertion. The Examiner's combination with Chinn et al. does nothing to further the Examiner's argument, as Chinn et al. is only cited to, “disclose an actuator, which may be used as a pump.” *See* page 3 of the Office Action dated November 23, 2010. Thus, one having ordinary skill in the art would easily understand that neither da Costa nor Chinn et al. teaches, “a plurality of individual actuators arranged contiguously in a series and located in the chamber opposite to the inner surface and *in contact with the liquid*,” as required by claim 58.

Next, the Examiner argues that the third reference, Bar-Cohen, teaches actuators in contact with the fluid. The Examiner reasons that “[i]n Bar-Cohen et al the actuators are in contact with the fluid through the driven plate 102.” The structure of Bar-Cohen is best illustrated in Fig. 1, reproduced on page 18 of the Appeal Brief, where it is evident that the fluid is pumped between plates 102 and 104. *See also*: Abstract, Col. 4, lines 52-53 of Bar-

Cohen. One having ordinary skill in the art would find that a fluid would contact only plates 102 and 104, and would not contact the actuators 108.

Recent cases have confirmed the plain meaning of the term 'contact' as, "the touching of two objects or surfaces" and, "a touching or meeting." *See Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302 (Fed. Cir. 2002); and *McNeil-PPC, Inc. v. Perrigo Co.* 443 F.Supp. 2d 492 (S.D.N.Y. 2006). These cases fully support Appellant's position regarding the meaning of 'in contact'. The liquid within Bar-Cohen's structure never 'touches' or 'meets' with any surface of the actuators 108, and therefore it is not 'in contact' with the actuators. The Examiner's argument regarding the absence of a requirement of, "in direct contact" (page 10 of the Examiner's Answer) is without merit, since the accepted meaning of 'contact' sufficiently describes the structure claimed in claim 58 and Bar-Cohen's structure does not teach any 'contact' between the actuators 108 and the liquid.

The Examiner's support for the continued rejections is based on incorrect understandings of the references' teachings, misleading arguments, and erroneous definitions for conventionally well-defined terms. None of the cited references, da Costa, Chinn et al., and Bar-Cohen, individually teach the requirements of claim 58. Moreover, the primary reference da Costa is incompatible with liquids and the secondary references Chinn et al. and Bar-Cohen. Therefore, no combination of the references can be said to teach the claimed structure of claim 58, nor does any combination provide sufficient support for rejecting claim 58 as obvious.

Therefore, Appellant respectfully requests allowance of claim 58 over the cited art.

Independent claim 63 is substantially similar to independent claim 58, and therefore is allowable over the cited art for the same reasons as put forth with respect to independent claim

58. As claims 2, 3, 15, 19-21, 24-26, 59-61, 63-65 and 70-78 depend on either claim 58 or 63, they too are allowable over the cited art.

Turning to the rejection of claims 5-7 and 65-69 as unpatentable over da Costa in view of Chinn and Bar-Cohen as applied to claims 58, 63 and 59 above, and further in view of Culp, the deficiencies of the da Costa/Chinn//Bar-Cohen combination vis-à-vis claims 58, 63 and 59 are discussed above. The Examiner cites Culp as teaching a programmable electric controller responsive to a sensor sensing property such as pressure and temperature in a piezo electric pump. Even assuming arguendo Culp is as the Examiner suggests, Culp does not supply the missing teachings to the primary combination above discussed, to achieve or render obvious claim 58 or 63. According, no combination of da Costa, Chinn, Bar-Cohen and Culp reasonably could be said to achieve or render obvious claim 58 or claim 63, or claims 5-7 and 65-69 which depend directly or indirectly thereon, as the case may be.

CONCLUSION

In view of the foregoing, it is respectfully requested that the Examiner's rejection of the subject application be reversed in all respects.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account Number 08-1391.

Respectfully submitted,



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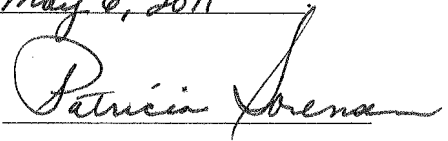
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CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being deposited within the United States Patent Office via the electronic filing procedure on May 6, 2011

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